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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,309	07/13/2006	Christopher Temple	SC12401EM	4979

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FREESCALE SEMICONDUCTOR, INC.
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EXAMINER

GUYTON, PHILIP A

ART UNIT	PAPER NUMBER
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2113

NOTIFICATION DATE	DELIVERY MODE
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11/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/567,309	Applicant(s) TEMPLE, CHRISTOPHER	
	Examiner PHILIP GUYTON	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,10,11,13-20 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 1,4-6,10,11,14-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 3,13,26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20091013</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 October 2009 has been entered.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description: figure 3, items 361, 371, 381; figure 4, items 401, 402, 411, 412, 421, 422, 431, 432, 441, 442, 451, 452, 461, 462, 471, 472, 481, 482, 493, 498; figure 5, items 501, 502, 511, 512, 521, 522, 531, 532, 541, 546, 551, 556, 561, 562, 571, 572, 581, 582, 590-595. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference characters in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of

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an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-6, 10, 11, 14-18, and 20 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 7,124,316 to Kopetz et al. (hereinafter Kopetz) in view of U.S. Patent Pub. No. 2005/0164699 to Temple et al. (hereinafter Temple).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

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reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

With respect to claim 1, Kopetz discloses an arrangement for connecting a node in a distributed system containing fail-uncontrolled nodes, the arrangement comprising:

- a receiver for receiving signals from another node of the system (column 3, lines 57-61), and

- a node guardian coupled to the receiver (column 3, lines 4-10 and lines 61-66) to control selectively reception according to a predetermined TDMA schedule of a message thereat so as to reduce reception of uncontrolled transmission from another node of the system (column 2, lines 30-39 and column 2, line 52-column 3, line 3);

- wherein the node guardian comprises:

- a switch for receiving a plurality of input signals; and

- a controller (column 3, line 64-column 4, line 1).

However, Kopetz does not disclose expressly wherein the node guardian comprises:

- logic coupled to the switch for combining the plurality of received signals according to a predetermined logic function, and

- a controller coupled to the switch for controlling application of the plurality of received signals to the logic.

Temple teaches a node guardian comprising logic coupled to a switch for combining a plurality of received signals according to a predetermined logic function, and a controller coupled to the switch for controlling application of the plurality of received signals to the logic (paragraph 32 and figure 5, item 590).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kopetz by including logic and controller as taught by Temple. A person of ordinary skill in the art would have been motivated to do so because the switches, as taught by Kopetz (column 3, line 64-column 4, line 1), must be controlled by some type of controller including logic. The logic and controller of Temple “provide a dependable communication in the event of a node error/failure by enforcing fail-silence of the node in the time domain” (paragraph 33). Therefore, it would have been obvious to combine Temple with Kopetz, in keeping with this desire (Kopetz – column 1, lines 5-12 and column 2, lines 61-63).

With respect to claim 4, modified Kopetz discloses wherein the controller is arranged to control the switch according to the predetermined TDMA schedule (column 2, lines 52-60 and Temple – paragraph 33).

With respect to claim 5, modified Kopetz discloses a distributed system comprising the arrangement according to claim 1 (abstract).

With respect to claim 6, modified Kopetz discloses at least one node having bus guardian (column 3, lines 55-57 and figure 1).

With respect to claim 10, modified Kopetz discloses wherein the system is one of A-B: A a TTP/C system, B a FlexRayTM system (column 1, lines 33-59).

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With respect to claim 11, modified Kopetz discloses a method of operating a node in a fail-uncontrolled distributed system, the method comprising:

providing a receiver receiving signals from another node of the system (column 3, lines 57-61), and

providing a node guardian coupled to the receiver (column 3, lines 4-10 and lines 61-66) and controlling selectively according to a predetermined TDMA schedule reception of a message thereat so as to reduce reception of uncontrolled transmission from another node of the system (column 2, lines 30-39 and column 2, line 52-column 3, line 3);

wherein the node guardian comprises:

a switch receiving a plurality of input signals (column 3, line 64-column 4, line 1);

logic coupled to a switch and combining a plurality of received signals according to a predetermined logic function; and

a controller coupled to the switch and controlling application of the plurality of received signals to the logic (Temple - paragraph 32 and figure 5, item 590)

With respect to claim 14, modified Kopetz discloses wherein the controller controls the switch according to the predetermined TDMA schedule (column 2, lines 52-60 and Temple – paragraph 33).

With respect to claim 15, modified Kopetz discloses a method of operating a distributed system comprising the method of operating a node according to claim 11 (abstract).

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With respect to claim 16, modified Kopetz discloses providing at least one node having the bus guardian (column 3, lines 55-57 and figure 1).

With respect to claim 17, modified Kopetz discloses:

operating a first node according to claim 11 (figure 1, V1),

operating a second node according to claim 11 (figure 1, V2),

providing a first group of nodes having respective bus guardians (figure 1, K1),

and

providing a second group of nodes having respective bus guardians (figure 1, K2),

wherein the first group is coupled to the first and second nodes via a first common channel (figure 1, C11, C12 and figure 2), and the second group is coupled to the first and second nodes via a second common channel (figure 1 and figure 2), the first group and the first node forming a first error containment region, and the second group and the second node forming a second error containment region (column 2, line 62-column 3, line 10 and column 4, lines 18-24).

With respect to claim 18, modified Kopetz discloses the first group further being coupled to the first and second nodes via a third common channel (figure 1, C11, C12 and figure 2), and the second group further being coupled to the first and second nodes via a fourth common channel (figure 1 and figure 2).

With respect to claim 20, modified Kopetz discloses wherein the system is one of A-B: A a TTP/C system, B a FlexRayTM system (column 1, lines 33-59).

Allowable Subject Matter

5. Claims 3, 13, 19, 26, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 25 is allowed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP GUYTON whose telephone number is (571) 272-3807. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Philip Guyton/
Examiner, Art Unit 2113